REMARKS

Claims 1-12 are currently pending and under consideration. Independent claims 1, 3, and 12 have been amended. Claim 2 has been cancelled.

Claims 1-12 were rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,807,654 (Akutagawa).

Akutahgawa is directed to a detection method for detecting a specific pattern of a mask used when semiconductor products, display devices for plasma display panels, liquid crystal display panels, or magnetic devices are produced. The reference also discloses a checking method for checking the pattern detected by the detection method, in addition to a pattern correcting and processing method. One of ordinary skill in the art would appreciate that the used pattern is a two-dimensional graphic.

Column 5, lines 22-36 of the cited document particularly states:

> In step S16, the distance between the adjacent patterns is a distance smaller than such a distance that the influence of the pattern deformation can be ignored at the time of pattern forming, but patterns having the same distance between patterns adjacent to each other in a lateral direction (X direction) or the same distance between patterns adjacent to each other in a vertical direction (Y direction) are also detected as alignment candidate patterns. Patterns having the same distance between patterns adjacent to each other in a lateral direction (X direction and the same distance between patterns adjacent to each other in a vertical direction (Y direction) are also included in the alignment candidate patterns.

The present invention is characterized with the conversion check apparatus. That is, conversion check apparatus 1 checks the analytical model generated by data conversion unit 3, including a conversion check facility unit 11, volume calculation facility unit 12, surface area calculation facility unit 13, barycenter position calculation facility unit 14, and conversion check display unit 15. The conversion check facility unit 11 allows an operator to select the contents to be checked. Then, a target three-dimensional model is read from the intermediate file 21, 31, and input into the volume calucation facility unit 12, the surface area calculation facility unit 13, and the barycenter position calculation facility unit 14, according to the selection result by the operator, thereby performing various calculations.

The volume calculation facility unit 12 obtains the difference in the volume of the three-dimensional model before and after the conversion. The barycenter position calculation facility unit 14 obtains the difference in the barycenter positions of the three-dimensional model before and after

the conversion. The conversion check display unit 15 displays for the operator, by screen display or printing, the various differences obtained by the conversion check facility unit 11, the volume calculation facility unit 12, the surface area calculation facility unit 13, and the barycenter position calculation facility unit 1, as indicated by the language of claim 2. *See* FIG. 2.

Applicants respectfully submit that independent claims 1, 3, and 12 are patentable over Akutahgawa, as Akutahgawa does not disclose, "a calculation unit obtaining a difference between the analytic model and the three-dimension model; and a conversion check display unit displaying the difference."

In contrast to the present invention, Akutahgawa's used pattern is simply a two-dimensional graphic. The reference includes no disclosure regarding a "Z" direction, that is, a three-dimension, as a layout does not have to be three-dimensional. Therefore, the difference obtained in the present invention is not obtained in Akutahgawa. Hence, independent claims 1, 3, and 12 are patentable over Akutahgawa.

As dependent claims 2 and 4-11 depend from independent claims 1 and 3, respectively, the dependent claims are patentable over Akutahgawa for at least the reasons presented for the independent claims.

On page 4 of the Office Action, claims 3-12 were rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent Application Publication No. U.S. 2003/0011589 A1 (Desbrun).

Desbrun discloses technology for deriving barycentric coordinates within an n-sided polygon and technology for applying the derivation to a three-dimensional space.

Applicants respectfully submit that independent claims 3 and 12 are patentable over Desbrun, as Desbrun does not disclose, "a calculation unit obtaining a difference between the analytic model and the three-dimension model; and a conversion check display unit displaying the difference."

Although Desbrun discloses computing weights in a 3D space for vertices in a mesh representation. In contrast to the present invention, Desbrun does not obtain a *difference* between an analytic model and a three-dimension model. Moreover, Desbrun does not disclose a conversion check display unit displaying the difference, as a difference is not obtained in Desbrun.

Therefore, independent claims 3 and 12 are patentable over Desbrun. As dependent claims 4-11 depend from independent claim 3, the dependent claims are patentable over Desbrun for at least the reasons presented for the independent claims.

It is submitted that claims 1-12 are in a condition suitable for allowance. Reconsideration of the claims and an early Notice of Allowance are earnestly solicited.
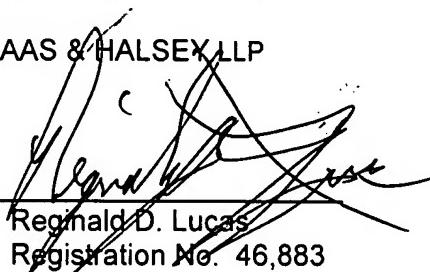
Finally, if there are any formal matters remaining after the response, the Examiner is requested to telephone the undersigned to attend to these matters.

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

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